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Ameren Ex. 2.0

ILLINOIS COMMERCE COMMISSION

ICC DOCKET NO. 07-0539

Admitted
1/10/08
pursuant to
ALJ Ruling

DIRECT TESTIMONY

OF

RICHARD A. VOYTAS

Submitted On Behalf

Of

CENTRAL ILLINOIS LIGHT COMPANY
d/b/a AmerenCILCO,

CENTRAL ILLINOIS PUBLIC SERVICE COMPANY
d/b/a AmerenCIPS and

ILLINOIS POWER COMPANY
d/b/a AmerenIP

(The Ameren Illinois Utilities)

November 15, 2007

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name and business address.

A. My name is Richard A. Voytas. My business address is One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri, 63103.

Q. By whom are you employed and in what capacity?

A. I am the Manager of Energy Efficiency and Demand Response for Ameren Services Company ("Ameren Services") in support of the Ameren Illinois Utilities.

II. PURPOSE AND SCOPE

Q. What is the purpose of your Direct Testimony in this proceeding?

A. My Direct Testimony will describe in detail the Ameren Illinois Utilities' energy efficiency and demand response planning processes and resulting implementation plan to

meet the energy efficiency and demand response requirements for 2008 through 2010 in compliance with Public Act 95-0481, specifically, Section 12-103 of the Public Utilities Act ("Act"). I will further discuss the Ameren Illinois Utilities' plan for conducting an annual independent evaluation of the cost effectiveness of the Ameren Illinois Utilities portfolio of measures, as well as a full review of the three-year results of the broader net program impacts. This plan involves a stakeholder participative process to define the scope of work for an independent evaluation contractor, as well as the selection process for the contractor.

Q. Do the Ameren Illinois Utilities plan to allocate a portion of their budget to the demonstration of breakthrough equipment and devices?

A. Not at this time. The Ameren Illinois Utilities' current budget projections to achieve annual incremental energy efficiency and demand response savings goals are such that there are not sufficient funds to address research and development initiatives related to energy efficiency and demand response in the 2008-2010 implementation plan. The Ameren Illinois Utilities will focus on the successful implementation of energy efficiency and demand response programs in the first three-year implementation plan filing. We anticipate a gradual evolution to energy efficiency and demand response pilot programs, developed via a stakeholder process, which address breakthrough equipment and devices in their second implementation plan filing.

III. ANALYZING THE COST-EFFECTIVENESS OF ENERGY EFFICIENCY AND DEMAND RESPONSE MEASURES

Q. The Act requires that electric utilities shall implement cost-effective energy efficiency measures to meet certain incremental annual energy savings goals. Please

discuss how the Ameren Illinois Utilities will determine the cost-effectiveness of energy efficiency measures.

A. Analyzing cost-effectiveness begins with the identifying approximately 1,000 energy efficiency measures that touch all major customer classes including residential, commercial, and industrial, including measures addressing all major end uses for electricity (e.g., lighting, refrigeration, space cooling, space heating, water heating and motors). These measures are discussed beginning on page 20 of the Ameren Illinois Utilities' Implementation Plan, Ameren Ex.. 2.1.

Q. What is meant by the term "measures"?

A. An energy efficiency measure is a device, appliance or practice that, when implemented in a home business or manufacturing process, results in a reduction in the amount of energy used per unit of useful service. Ameren Illinois Utilities' witness Val Jensen sponsors testimony that describes the measure level screening analysis in detail.

Q. What is the next step in analyzing the cost effectiveness of energy efficiency measures?

A. The next step is the calculation of avoided costs. The term "avoided cost" in the context of energy efficiency refers to the cost avoided through a reduction in energy usage, i.e., the societal benefit of energy efficiency.

Q. How does a utility measure costs avoided through energy efficiency measures?

A. For the Ameren Illinois Utilities' purposes here, there are two components to avoided costs. The first component is avoided capacity cost – achieved by avoiding capacity additions through energy efficiency or load management strategies. The second component is avoided energy costs, which measures incremental energy savings.

Q. Please explain the basis for the Ameren Illinois Utilities' avoided cost estimate.

A. The Ameren Services' Commercial Transactions Group develops and maintains the Ameren forward market price curve, which captures both the capacity and energy cost components of avoided costs, and serves as a basis for the Ameren Illinois Utilities' avoided cost estimate. Ameren Services has provided ICF with the Ameren Illinois Utilities' cost savings estimates of substituting energy efficiency and demand response resources for supply-side resources. ICF then takes the Ameren Illinois Utilities' estimates of avoided costs and applies them in the numerator of the total resource cost test to determine the cost effectiveness of individual energy efficiency measures.

Q. Please discuss how Ameren Illinois Utilities determined the avoided capacity cost component.

A. Unlike the energy marketplace, there is not a liquid visible market for capacity in the Midwest Independent Transmission System Operator ("MISO") marketplace. Therefore, it is difficult to state precisely what are the market-based avoided capacity costs. However, the Ameren Services Commercial Transactions Group has information regarding several observable capacity transactions from which the market price for avoided capacity in the near term can be estimated. For years further into the future, the avoided capacity cost is based on the projected installed cost of a combustion turbine generator peaking plant. The actual values of avoided capacity costs provided by the Ameren Illinois Utilities to ICF are included in Ameren Ex.. 2.2.

Q. Please discuss how the Ameren Illinois Utilities determined the avoided energy cost component.

A. Unlike the relatively thin market information on capacity transactions, there is a robust, observable market for avoided energy costs through 2011. Ameren Services thus has developed the forward price curve for the near term based on observable market transactions. Longer-term market prices were forecasted using the MIDAS Gold market model. The MIDAS model is an electric generation economic dispatch model of the eastern interconnect region of the United States. The observable market is potentially provided by all of the following sources: the website of the broker Prebon, an email from the broker Amerex, an email from the broker ICAP, Megawatt Daily, Intercontinental Exchange ("ICE") End of Day report, ICE screen shot for intra-month pricing. The average of the bid and offer determine the market clearing price, and if several sources are available for the same time frame, an average of the sources is used.

The actual values of avoided energy costs provided by Ameren Illinois Utilities to ICF are included in Ameren Ex.. 2.3.

Q. Are emissions costs included in the estimation of avoided energy costs? If so, how?

A. For the observable market we make the assumption that market clearing prices include all known avoided costs, including emission avoidance. For the modeled values that extend beyond the observable market we run the MIDAS model, which includes a SO2, NOx and mercury cost that is relevant to electric energy efficiency and consistent with long-term resource planning studies.

Q. The Act states: "In calculating avoided costs of power and energy that an electric utility would otherwise have had to acquire, reasonable estimates shall be included of financial costs likely to be imposed by future regulations and legislation on

emissions of greenhouse gases." Please discuss how the Ameren Illinois Utilities considered future avoided costs due to emissions of greenhouse gases.

A. Ameren Illinois Utilities choose to use the high carbon dioxide ("CO2") case assumptions in the analysis of the cost-effectiveness of energy efficiency measures, in light of the likelihood that federal CO2 legislation will take effect beginning in 2012. The high CO2 case assumes a value of $15/short ton starting in 2012, increasing at 5% per year in real terms.

Q. How is the value of CO2 emissions avoidance captured in the cost-effectiveness analysis of the cost effectiveness of energy efficiency measures?

A. The value of CO2 is stated in terms of a dollar per short ton metric. The dollar per short ton metric has to be converted to a $/MWH metric. The conversion factor is based on the average Ameren generating unit CO2 emission rate of approximately 2,080 pounds per megawatthour ("MWh"). At this rate, the conversion factor for all intents and purposes is 1.0. In other words, $15 per short ton of CO2 is equivalent to $15 per MWh.

Q. Based on the outline of the process described above, what is the Ameren Services perspective on the timing and level of potential national greenhouse gas legislation?

A. Ameren Services developed the point of view, for resource planning purposes, that carbon legislation is likely to take effect beginning in 2012. While Ameren Corporation has not taken a specific policy position on this legislation, Ameren Services has taken steps to prepare for this development, in the form of defining a high, stringent CO2 case, a moderate CO2 case and a modified "business as usual" case. Carbon legislation, whether it is in the form of a tax or cap and trade mechanism, is forecast in terms of a dollar per short ton CO2 tax primarily to facilitate the calculation of avoided costs.

Q. If Ameren does not think it is likely that greenhouse gas legislation will take effect prior to 2012, how does potential greenhouse gas legislation impact the analysis of the cost effectiveness of energy efficiency measures for the Ameren Illinois Utilities 2008-2010 energy efficiency implementation plan?

A. Even though the energy efficiency implementation plan covers the period 2008-2010, the energy efficiency measures included in the plan have measure lives that continue well beyond 2010. For example, a compact fluorescent light ("CFL") can have an economic life ranging from seven to ten years. Consequently, the computation of the benefit to cost ratio for a program is the ratio of the net present value of the total benefits of the program to the net present value of the total costs as calculated over the lifetime of the measures. Therefore, to the extent that a measure's economic life extends beyond 2012, there is a greenhouse gas cost component captured in the benefit -to to-cost ratio for that energy efficiency measures.

Q. What is the next step after the identification of end-use measures, the calculation of avoided costs and the determination of the cost-effectiveness of energy efficiency end-use measures?

A. The next step is to bundle measures into a robust set of programs for the residential, commercial and industrial customer classes. The ultimate objective is to design a cost effective portfolio of programs that Ameren Illinois Utilities can efficiently implement given the fact that the Ameren Illinois Utilities do not currently have an existing energy efficiency program infrastructure in place. Combining cost-effective measures into programs is a somewhat subjective process, which involves the combination of the knowledge of best practice energy efficiency and demand response programs and the

overall Ameren Illinois Utilities energy efficiency/demand response portfolio objectives. The Ameren Illinois Utilities have retained Mr. Jensen, an expert in effective energy efficiency/demand response programs nationwide, to guide in this process. Mr. Jensen describes the process of developing a cost-effective portfolio in his testimony.

Q. Please discuss the Ameren Illinois Utilities' energy efficiency portfolio objectives.

A. The first and overriding objective is full compliance with the Act. Beyond meeting the Act's requirements, the Ameren Illinois Utilities view their mission in regards to energy efficiency as one of making consistent investment in innovation and a well-balanced portfolio of energy efficiency and demand response activities, combined with forward-thinking policy initiatives that will serve as a catalyst to a transformation of the market for energy services in the Ameren Illinois Utilities' service territories. The Ameren Illinois Utilities have additional objectives for their 2008-2010 energy efficiency and demand response implementation plan. Those objectives are:

- Provide coverage of hard-to-reach sectors such as low income and small commercial sectors;
- Address electric heating customer needs with a cost-effective program;
- Include, assuming budget availability, some educational/informational elements to promote changes in long-term customer energy consumption behavior;
- Strengthen customer service;
- Minimize rate impacts;
- Balance energy efficiency and demand response elements;
- Ensure portfolio flexibility; and
- Employ best practice portfolio design and program design.

IV. THE AMEREN ILLINOIS UTILITIES' ENERGY EFFICIENCY AND DEMAND RESPONSE PLAN

Q. Please list the programs included in Ameren Illinois Utilities' energy efficiency 2008-2010 implementation plan.

A. The programs are:

Residential Solutions:

- Residential Lighting and Appliances
- Home Energy Performance
- Heating, Ventilating and Air Conditioning ("HVAC") Diagnostics and Tune-Up
- New HVAC
- Refrigerator Recycling
- Residential Multi-Family
- Web-Based Energy Efficiency "Toolkit"

Business Solutions:

- Commercial and Industrial ("C&I") Prescriptive
- C&I Custom Incentive
- New Construction
- Retro Commissioning
- Municipal Street Lighting

Q. How will you structure your testimony relative to describing each program?

A. Each program is described in detail in Ameren Ex. 2.3 in the Implementation Plan document. Each program template addresses the following program parameters:

- Program objective
- Target market
- Program duration
- Program description
- Implementation strategy
- Exit Strategy
- Marketing strategy

- Eligible measures and incentive strategy
- Milestones
- Evaluation, measurement and verification requirements
- Administrative requirements
- Estimated participation
- Estimated budget
- Savings targets
- Program metrics
- Cost effectiveness tests

A. Residential Lighting and Appliances

Q. Please describe the Residential Lighting and Appliances program.

A. The Residential Lighting and Appliances program will acquire cost-effective energy efficiency through customer incentives, with the intention of increasing sales of ENERGY STAR-qualified appliances and lighting products to residential customers, educating consumers (building awareness and branding) through advertising and promotions to purchase ENERGY STAR-qualified products, expanding the retail penetration of ENERGY STAR-qualified products, and coordinate with and leverage current EPA/ Department of Energy ("DOE") efforts underway to promote qualified ENERGY STAR appliances and lighting products.

Q. What is the goal and purpose of this program?

A. This program will encourage customers to purchase more energy-efficient ENERGY STAR-rated appliances through the use of education and incentives.

Q. How will this program reduce the amount of electricity required to serve the end-use needs of the Ameren Illinois Utilities' customers, to reduce delivery load?

A. By reducing residential electricity consumption through utilization of more efficient lighting and appliances, the Ameren Illinois Utilities will provide the tools to facilitate residential customers' ability to reduce energy usage, which will decrease net future energy costs. The Ameren Illinois Utilities will receive the net benefit of a pro-rata decrease in electrical consumption for existing residential customers, thus allowing the Ameren Illinois Utilities to better manage long-term supply costs.

Q. Are there any other considerations with respect to efficient residential lighting initiatives?

A. Yes. The Ameren Illinois Utilities anticipate that there may be a need to recycle CFLs in an environmentally acceptable manner, and the need to seek bids to recycle CFLs as part of its comprehensive ENERGY STAR-related initiatives.

B. Home Energy Performance

Q. Please describe the residential programs targeting enhancement of a customer's existing infrastructure.

A. The Ameren Illinois Utilities plan to offer two programs in this area. The first program is the Home Energy Performance program which will initially provide residential customers who heat their homes using electricity, with a home diagnostic and improvement program that, as it establishes itself, can evolve into a more comprehensive ENERGY STAR Home Performance program focused on developing a local home-performance industry. Contractors hired by the Ameren Illinois Utilities will provide an energy audit and arrange for installation of insulation measures as warranted by the audit. In addition, as warranted, the contractor will coordinate with the HVAC Diagnostics and Tune-Up program to deliver those program services, as warranted. The second program, the

Residential HVAC Diagnostics and Tune-Up program, will utilize HVAC contractors who are trained to use one of several tools used to check refrigerant charge and airflow over the coils of an AC unit. Based on an analysis provided by a technician, the contractor provides recommendations regarding charge and airflow, which would then be implemented by a technician

Q. What is the purpose of the program?

A. Through the use of Residential Home Energy audits, customers have an option to receive expert information to complete comprehensive retrofit packages for energy efficiency improvement for existing single family homes. Through the Residential HVAC Diagnostic and Tune-Up program, customers will obtain energy and demand savings through improvement of the operating performance of residential central AC units.

Q. How will this program reduce the amount of electricity required to serve the end-use needs of the Ameren Illinois Utilities' customers, to reduce delivery load?

A. By reducing residential electrical consumption through tuning up existing building shell and HVAC infrastructure, the Ameren Illinois Utilities will provide the tools to facilitate a residential customer's ability to reduce energy usage, which will decrease net future energy costs. The Ameren Illinois Utilities will receive the net benefit of a pro-rata decrease in electrical consumption for existing residential customers, thus allowing the Ameren Illinois Utilities to better manage long-term supply costs.

C. Refrigerator Recycling

Q. Please describe the residential Refrigerator Recycling program.

A. The Refrigerator Recycling program will promote the retirement and recycling of working secondary refrigerators and/or freezers manufactured before 1993. We will

contract with an appliance recycling company to provide turnkey implementation services that include verification of customer eligibility, scheduling of pick-up appointments, appliance pickup, recycling and disposal activities, and incentive processing. In contractor selection, preference will be given to appliance recycling companies that have recycling/disposal facilities located in Illinois, or that are willing to construct such facilities given the anticipated volume resulting from the program. Recycling/disposal practices will be designed to prevent the release of chlorofluorocarbons ("CFCs") into the environment.

Q. What is the purpose or objective of the program?

A. The program will promote the retirement and recycling of secondary, inefficient refrigerators from households by offering a turn-in incentive and free pickup of working equipment, as well as information and education on the cost of keeping an inefficient unit in operation.

Q. How will this program reduce the amount of electricity required to serve the end-use needs of the customers, to reduce delivery load?

A. By reducing residential electrical consumption through elimination of old and inefficient secondary refrigerators, we will provide customers with a mechanism to proactively impact future energy usage which will decrease net future energy costs. The Ameren Illinois Utilities will receive the net benefit of a pro-rata decrease in electrical consumption for existing residential customers, thus, again, allowing AIU to manage long term supply costs.

D. Residential Multifamily Program

Q. Please describe the Residential Multifamily program.

A. The program will provide installation of measures in tenant spaces related to central AC unit diagnostics and tune-up. It also provides significant incentives for replacement of standard efficiency common area lighting and incandescent and fluorescent exit signs with LED exit signs. More expensive or complex measures (windows, replacement of roof-top AC units) would be subject to an energy analysis to validate cost-effectiveness and incentive levels.

Q. What is the purpose of the program?

A. The purpose is to deliver cost-effective conservation services to the multi-family housing market, with a focus on common area improvements.

Q. Will this program reduce the amount of electricity required to serve the end-use needs of the Ameren Illinois Utilities' customers, to reduce delivery load?

A. Yes. By reducing residential electrical consumption through more efficient lighting and properly tuned air conditioning, the Ameren Illinois Utilities will provide the tools to facilitate a residential customer's ability to reduce energy usage, which will decrease future energy costs. As with other programs described, the Ameren Illinois Utilities will receive the net benefit of a pro-rata decrease in electrical consumption for existing residential customers. This will, in turn allow the Ameren Illinois Utilities to better manage long-term supply costs.

E. Commercial and Industrial ("C&I") Prescriptive

Q. Please describe the C&I incentive-based programs that target upgrades to existing infrastructure through prescriptive and custom incentives.

A. The Ameren Illinois Utilities will offer two programs in this area, with the objective of encouraging C&I customers to purchase more energy-efficient technology: the C&I

Prescriptive Incentive Program and the C&I Custom Incentive Program. The C&I Prescriptive Incentive Program will provide incentives for energy-efficient products that are readily available in the marketplace. The C&I Custom Incentive Program will provide financial assistance to customers to support implementation of high-efficiency opportunities, which are available at the time of new equipment purchases, facility modernization, and industrial process improvement.

Q. What is the purpose of these programs?

A. Each program is intended to encourage C&I customers to purchase energy efficient technologies when upgrading their facilities.

Q. How will this plan reduce the amount of electricity required to serve the end-use needs of the Ameren Illinois Utilities' customers, to reduce delivery load?

A. Through the use of incentives targeting new energy-efficient technologies, the Ameren Illinois Utilities will encourage C&I customers to replace older inefficient technologies with newer, more efficient technologies. The net effect of these programs for customers will be to reduce the cost of the technology upgrades and to lower long-term energy costs through more energy efficient processes.

F. New Construction

Q. Please describe the Commercial New Construction Program.

A. The Commercial New Construction Program will promote energy efficiency through a comprehensive effort to influence building design practices. The program will work with building owners/managers, design professionals, trade allies, and contractors to design and construct high- performance buildings that provide improved energy efficiency, strong environmental performance, systems performance and comfort. This will be

accomplished through an integrated design process that results in improved efficiency in the building envelope, lighting, HVAC and other energy and resource-consuming systems.

Q. Please describe the goal of this particular program.

A. The goal of this program is to capture energy efficiency opportunities which are available during the design and construction of new buildings, major renovations and tenant build-outs in the non-residential market that are being built to meet Leadership in Energy And Environmental Design ("LEED") certification standards.

Q. What is LEED?

A. The LEED Green Building Rating System, developed by the U.S. Green Building Council ("USGBC"), provides a suite of standards for environmentally sustainable construction. Since its inception in 1998, LEED has grown to encompass over 14,000 projects in all of the 50 States and 30 countries covering 1.062 billion square feet (99 km^2) of development area. The hallmark of LEED is that it is an open and transparent process where the technical criteria proposed by the LEED committees are publicly reviewed for approval by the more than 10,000 membership organizations that currently constitute the USGBC.

Q. How will this plan reduce the amount of electricity required to serve the end-use needs of the Ameren Illinois Utilities' customers, to reduce delivery load?

A. Through the use of education to promote energy-efficient design practices, the Ameren Illinois Utilities will encourage commercial builders to use energy efficiency best practices when planning and designing new construction projects. Commercial customers will be able to reduce future energy usage, which will decrease net future

energy costs. The Ameren Illinois Utilities will receive the net benefit of a pro-rata decrease in electrical consumption for new commercial construction, thus allowing the Ameren Illinois Utilities to better manage long-term supply costs.

G. Retro Commissioning

Q. Please describe the C&I Retro-Commissioning program.

A. The C&I Retro-Commissioning program is intended to help building owners and managers determine the energy performance of buildings, to identify major opportunities for improving performance through re-optimization of existing systems and replacement of under-performing equipment, and to provide financial support for taking recommended actions (in some cases). The program would provide several related sets of services including initial qualification based on benchmarking or quick facility assessments, more detailed facility assessments intended to identify opportunities for systems improvements, development of a retro-commissioning plan, training, direct installation of low-cost measures and verification of plan implementation and incentive fulfillment.

Q. What is the focus of the plan?

A. Through the use of C&I energy audits, the purpose of the plan is to provide customers with the tools to improve the performance of energy-using equipment in their existing buildings by focusing on optimizing mechanical equipment and related controls.

Q. How will this plan reduce the amount of electricity required to serve the end-use needs of the Ameren Illinois Utilities' customers, to reduce delivery load?

A. By reducing C&I electrical consumption through more efficient processes and technologies, the Ameren Illinois Utilities will provide the tools to facilitate C&I

customers' ability to reduce future energy usage, which will decrease net future energy costs. The Ameren Illinois Utilities will receive the net benefit of a pro-rata decrease in electrical consumption for existing C&I customers, thus allowing better management of long-term supply costs.

H. Municipal Street Lighting

Q. Please describe the Street Light program.

A. This program will target customers in the Ameren Illinois Utilities' service territory that have mercury vapor and/or incandescent street light fixtures that are owned by the Ameren Illinois Utilities. The Ameren Illinois Utilities will use financial incentives to encourage adoption of the replacement bulbs.

Q. What is the purpose of the plan?

A. The Street Light program will target street lights owned by the Ameren Illinois Utilities with the objective of replacing older inefficient street lights with new high efficiency street lights.

Q. Will this plan reduce the amount of electricity required to serve the end-use needs of the Ameren Illinois Utilities' customers, to reduce delivery load?

A. By replacing older, inefficient street light bulbs, the Ameren Illinois Utilities will be able to reduce street light electrical consumption through utilization of more efficient bulbs. The program will impact future energy usage, which will reduce future energy costs and receive the net benefit of a pro-rata decrease in electrical consumption for existing customers, thus allowing the Ameren Illinois Utilities to manage long-term supply costs.

Q. How did the Ameren Illinois Utilities develop their implementation plan around the demand response provisions of the Act?

A. The Act requires that electric utilities shall implement cost-effective demand-response measures to reduce peak demand by 0.1% over the prior year for eligible retail customers. Eligible retail customers are retail customers that purchase power and energy from the electric utility under fixed-price bundled service tariffs (other than those retail customers whose service is declared competitive) and certain other customer groups, including customers who have self-generation, customers electing hourly pricing, or those customers who are otherwise ineligible for fixed-price bundled tariff service. Consequently, the first step was to estimate the peak load requirements associated with the eligible customer group.

Q. How did the Ameren Illinois Utilities estimate the eligible customer group around which to develop the demand response implementation plan?

A. Ameren Illinois Utilities used the estimates the load we're planning to serve per our power procurement plan.

Q. What are the Ameren Illinois Utilities' estimates of the peak demand and the associated peak reductions for eligible customers for the 2008-2011 implementation planning period?

A. The Ameren Illinois Utilities' estimate of peak demand reduction associated with a 0.1% reduction in the peak demand of eligible customers is:

Year	Peak Demand Reduction (MW)
2008	**5 MW**
2009	**10 MW**
2010	**15 MW**

Q. Please list the programs included in Ameren Illinois Utilities' 2008-2010 implementation plan that address demand response.

A. Those programs are:

Residential Solutions:

- Residential Air Conditioning ("AC") Unit Direct Control

Business Solutions

- Commercial Demand Credit

Q. Please describe the residential demand response program, the AC Unit Direct Load Control.

A. Almost 100% of the Ameren Illinois Utilities' residential customers have a central AC system. These systems typically account for approximately half of a home's summer peak demand. Under the Direct Load Control program, the Ameren Illinois Utilities provide for free equipment and installation of a switch mounted on the outside AC unit that uses a one-way paging strategy. During summer peak periods, the Ameren Illinois Utilities would activate the switch, resulting in cycling of the central AC unit. Customers may receive an incentive in return for giving the Ameren Illinois Utilities the option to cycle their air conditioner.

Q. What is the purpose of the plan?

A. The residential Direct Load Control program is designed to acquire peak demand reduction through fully-automated Direct Load Control demand response systems for the residential sector. This plan will allow the Ameren Illinois Utilities to cycle air conditioners, during periods of tight supply conditions through the use of automated switches. Through participation, residential customers will be paid an incentive in return for giving the Ameren Illinois Utilities the option of cycling their air conditioner.

Q. How will this plan reduce the amount of capacity required to serve the end-use needs of the Ameren Illinois Utilities' customers?

A. Through the use of this program, the Ameren Illinois Utilities will be able to use a customer demand-response option to manage the need to purchase expensive peak power during periods when the transmission system is constrained or when market prices are high. These savings are then shared with participating customers though incentive payments as well in the form of future lower costs to acquire power supply to serve the needs of customers during peak periods.

Q. Please describe the Commercial Demand Credit program.

A. Under the Commercial Demand Credit program, the Ameren Illinois Utilities will work with customers to determine equipment which may be switched off through automated dispatch from the Ameren Illinois Utilities. To facilitate this effort, a Control Work Reaction Plan is developed through coordinated efforts with the customer. During peak demand periods, the Ameren Illinois Utilities (likely working through a third party implementation contractor) will notify the customer and activate a wireless signal that activates the switch, which in turn relays the equipment on and off. Customers are paid an incentive in return for giving the Ameren Illinois Utilities various cycling options.

Q. What is the purpose of the program?

A. This plan will target the acquisition of 2.5 MW of peak demand reduction through fully-automated Direct Load Control demand response systems for the small commercial sector who choose to remain on bundled service.

Q. How will this plan reduce the amount of capacity required to serve the end-use needs of the Ameren Illinois Utilities customers?

A. Through the use of this program, the Ameren Illinois Utilities will be able to use a demand response option to manage the need to purchase expensive peak power during

periods when the transmission system is constrained or market prices are high. These savings are then shared with participating customers through incentive payments, as well in the form of future lower costs to acquire power supply to serve the needs of customers during peak periods.

V. INTEGRATION OF THE AMEREN ILLINOIS UTILITIES/DCEO ENERGY EFFICIENCY PORTFOLIOS

Q. How did the Ameren Illinois Utilities estimate the incremental annual savings goals specified in the Act?

A. The basis for the forecast of delivery system sales for the Ameren Illinois Utilities is the 2007-2011 sales forecast. The base 2008-2010 energy delivery sales forecast is:

Year	Sales (MWh)
2008	38,462,615
2009	38,865,191
2010	39,308,227

The incremental annual energy savings goals were then applied to each year of the forecasted sales in the following manner:

Year	Sales (MWh)	Savings Goals	Cum. Savings Targets (MWh)
2008	38,462,615	0.2%	76,925
2009	38,788,266*	0.4%	155,153 + 76,925 = 232,078
2010	39,076,149**	0.6%	232,078+234,457 = 466,535

* 38,865,191 – 76925 = 38,788,266

** 39,308,227-232,078 = 39,076,149

Q. What are the estimated annual energy efficiency budget limits such that the estimated average increase in the amounts paid by retail customers in connection with electric service due to the cost of energy efficiency measures increase by no more than 0.5% for each year of the 2008-2010 implementation plan?

A. Ameren witness Leonard Jones, is sponsoring testimony that addresses the estimated budget limits. I simply will recap the results of Mr. Jones analysis. The annual energy efficiency budget limits are estimated to be:

Year	Budget Limit
2008	$13,804,287
2009	$29,048,741
2010	$44,830,037

Q. In the development of their energy efficiency and demand response portfolio, did the Ameren Illinois Utilities apply the estimated budget limits to the entire portfolio or to individual customer classes?

A. The Ameren Illinois Utilities applied the estimated budget limits to the entire portfolio.

Q. Please explain.

A. The energy efficiency cost-effectiveness metric specified in the Act is the total resource cost test ("TRC"). The TRC has its origins in the integrated resource planning rules from the early 1990s. It is a test that measures the cost effectiveness of demand-side programs on an equivalent basis with supply-side generation options. The fundamental objective of the test is to provide the public with energy services that are safe, reliable and efficient, at just and reasonable rates, in a manner that serves the public interest. The Act is consistent with this perspective. As Section 12-103 (a) states:

> (a) It is the policy of the State that electric utilities are required to use cost-effective energy efficiency and demand-response measures to reduce delivery load. Requiring investment in cost-effective energy efficiency and demand-response will reduce direct and indirect costs to consumers by decreasing environmental impacts and by avoiding or delaying the need for new generation, transmission, and distribution infrastructure.

Consequently, load reductions attributable to energy efficiency will benefit all customer classes by deferring, and possibly, minimizing the need to build new power plants. Therefore, it is appropriate to apply the estimated budget limit to the entire portfolio of energy efficiency and demand response programs. It is understood that the portfolio represents a diverse cross-section of opportunities for customers of all rate classes to participate in the programs.

Q. To summarize the integration steps thus far, the Ameren Illinois Utilities identified cost-effective energy efficiency and demand response programs that represent a diverse cross section of opportunities for customers of all rate classes to participate in the programs; the annual load reduction goals have been calculated; and an estimate of the annual budget limits for the 2008-2010 implementation plan have been calculated. What is the next step?

A. At this point, the Ameren Illinois Utilities' energy efficiency team and ICF work together to identify a portfolio to meet the targeted load reductions without including placeholders for the DCEO energy efficiency portfolio. The essence of a portfolio is balance – a mix of investments corresponding with different objectives and different risk profiles that help ensure goals are met even if individual programs under-perform. The Ameren Illinois Utilities' Implementation Plan (included in Appendix B) elaborates on this process.

Q. What are some of the highlights of the initial Ameren Illinois Utilities' energy efficiency portfolio?

A. The initial portfolio results provide perspective on the expected costs to meet the load reduction goals specified in the Act. In our case, the initial portfolio results, including the

projected portfolio cost estimates, showed it is likely that we will approach the 0.5% average retail rate increase limits in each year of the 2008-2010 implementation plan. Knowing this, the Ameren Illinois Utilities provided guidance to DCEO indicating the Ameren Illinois Utilities' budget for the DCEO energy efficiency portfolio is 25% of the revenue requirements associated with the rate limits specified in the Act for each year of the implementation planning period.

Q. Discuss the different types of risk inherent in the Ameren Illinois Utilities' energy efficiency and demand response portfolio.

A. There are four basic types of portfolio risk. Performance risk is the risk that, due to design or implementation flaws, the program does not deliver expected savings at the pro forma implementation plan cost estimates. This risk is common to all program types. The Ameren Illinois Utilities recognize that their expansive service territory of the over 44,000 square miles they serve and the relatively sparse population of less than 30 customers per square mile, may pose higher than normal performance risks – especially in terms of the cost to reach customers. Even though we expect to manage this risk, to put this risk in perspective, the largest investor-owned utility in Illinois, Commonwealth Edison Company ("ComEd"), covers 11,300 square miles and serves approximately 3.7 million customers. This equates to 327 customers per square mile. Technology risk is that technologies targeted by a program fail to deliver the savings expected. This risk is concentrated in programs that target emerging technologies. The 2008-2010 Ameren Illinois Utilities' portfolio minimizes this risk by design. Market risk is the risk that, either because of a poor economic climate or the availability of better investments, customers choose not to participate in a program. Finally, evaluation risk is that

independent evaluation measurement and verification of program results will, based on different assumptions, conclude that savings fall short of what the Ameren Illinois Utilities and ICF have estimated.

Q. What are the Ameren Illinois Utilities' plans to address the various types of risk?

A. First, the Ameren Illinois Utilities' tolerance for the risk of not achieving the load reduction goals specified in the Act is low. This implies a preference for a core of programs with relatively standard and straightforward program designs, high historic net-to-gross ratios and a track record of successful implementation in other jurisdictions. It is for these reasons that we engaged an experienced, national energy efficiency consulting partner, ICF, to provide guidance in the development of the programs in our portfolio. Second, when we select third-party program administrators to implement the programs in the Ameren Illinois Utilities' portfolio, we will consider the option of asking program administrators to assume a larger share of performance risk by tying payment to delivered savings. Third, where risks are closely associated with being able to influence a mass market, we may consider mitigating risk by moving program focus upstream to retailers, distributors or manufacturers, where greater control over performance may be possible.

Q. Please discuss evaluation risk.

A. The discussion of evaluation risk is included in Section VI of my testimony on measurement and verification of the cost effectiveness of energy efficiency measures.

Q. The law requires that electric utilities shall implement 75% of the energy efficiency measures approved by the Commission. The remaining 25% of the energy efficiency measures approved by the Commission shall be implemented by DCEO and must be designed in conjunction with the utility and the filing process. Please

explain how Ameren Illinois Utilities and DCEO worked together to determine how to allocate the energy efficiency measures.

A. Actually, the Ameren Illinois Utilities and DCEO coordinated, among other actions, energy efficiency measure screening issues, program design issues, and budget issues starting in mid-August 2008 and continuing through the preparations for this filing. There was consensus in the interpretation of the Act concerning allocating DCEO 25% of each electric utility's energy efficiency budget – including portfolio administration costs and evaluation, measurement and verification costs. Also, there was an understanding that the electric utilities' budgets that address demand response programs should be removed from the overall budgets prior to assigning the 75%/25% split, since DCEO is not required to administer demand response programs in its portfolio. There was consensus that DCEO would administer energy efficiency programs targeted to households at or below 150% of the poverty level.

Q. Is there a clear line of distinction between the Ameren Illinois Utilities' energy efficiency programs and those administered by DCEO?

A. In general, the DCEO programs are targeted to units of local government, municipal customers, school districts, community college districts and the low-income customer sector.

Q. Are there areas where DCEO energy efficiency programs and the Ameren Illinois Utilities' programs complement each other?

A. Yes. DCEO has a category of program offerings under the heading of "market transformation" that may complement the Ameren Illinois Utilities' programs in terms of design assistance and customer information and education.

Q. If DCEO is allocated 25% of the Ameren Illinois Utilities' energy efficiency budget, will DCEO be required to contribute 25% of the Ameren Illinois Utilities' load reduction goals during the 2008-2010 implementation plan?

A. Absent the requirement to develop a robust set of energy efficiency program options for the low income sector, it would be reasonable to assume that DCEO should be accountable to achieve 25% of the savings goals, given the DCEO allocation of 25% of the Ameren Illinois Utilities' energy efficiency budget. However, since the costs to deliver meaningful low-income energy efficiency programs can be as much as five times more costly than delivering programs to the entire residential class, the Ameren Illinois Utilities and DCEO have an understanding that the DCEO energy efficiency portfolio will achieve a minimum of approximately 19% of the Ameren Illinois Utilities' load reduction goals in 2008 and 2009 and 20% in 2010. In any event, the Ameren Illinois Utilities and DCEO intend to work together to achieve the load reductions specified in the Act.

Q. What is the final step in integrating the joint Ameren Illinois Utilities and DCEO energy efficiency and demand response portfolios?

A. Knowing the DCEO allocation of the Ameren Illinois Utilities' energy efficiency budget for 2008-2009, as well as the DCEO allocation of the overall load reduction goals for each of the year, DCEO developed a robust set of programs to meet, among other things, the requirements of the Act. The DCEO final portfolio was passed to us. Working with ICF, we re-optimized the Ameren Illinois Utilities' portfolio to include the DCEO portfolio. Since the Ameren Illinois Utilities' initial portfolio assumed 100% compliance with the load reduction goals specified in the Act, the re-optimization process involved

reducing several of the Ameren Illinois Utilities' program-estimated load reductions by amounts equivalent to the individual load reductions in the DCEO portfolio, such that the overall portfolio continued to meet the incremental annual energy savings goals in the Act.

VI. EVALUATION, MEASUREMENT AND VERIFICATION OF THE COST EFFECTIVENESS OF ENERGY EFFICIENCY AND DEMAND RESPONSE PROGRAMS

Q. Please discuss the framework for your testimony around evaluation, measurement and verification ("M&V") of the cost effectiveness of the Ameren Illinois Utilities/DCEO portfolio of energy efficiency programs.

A. M&V is one of the more significant issues associated with the implementation plan filing. It is significant for at least three reasons. First, the Act specifies economic penalties as well as potential governance penalties for failure to meet load reduction goals after years two and three of the implementation plan. Second, the Act specifies that the M&V budget shall not exceed 3% of the total portfolio budget. Third, an issue raised during the Illinois statewide stakeholder energy efficiency meetings/discussions in August – November 2007 was the issue of pre-approval of "deemed" savings or savings based on stipulated values which come from historical values of typical projects.

Q. Please provide your perspective relative to potential economic and governance penalties associated with failure to meet load reduction goals during the implementation planning period.

A. The Ameren Illinois Utilities intend to meet the load reduction goals, and, if possible, exceed the load reduction goals specified in the Act. Our intent is to be a performance leader in the delivery of cost-effective energy efficiency products and services to our

customers. As stated in our overall energy efficiency portfolio objectives, we view the opportunity to partner with customers to be critical to our mission to strengthen customer service. It is essential that the Ameren Illinois Utilities work with stakeholders and the Commission to develop a common understanding of the ground rules for measurement and verification of savings attributable to the overall portfolio of energy efficiency measures.

Q. Please provide your perspective relative to the budget limitations for M&V stated in the Act.

A. We believe the Act is written to provide as much benefit in terms of energy efficiency program options to customers as possible. To the extent that more money is allocated to M&V activities, less money is allocated to the implementation of programs – given a limited budget. Therefore, we understand and agree with the reasoning in limiting the M&V budget to 3% of the total portfolio budget. However, a limit of 3% for M&V is restrictive in terms of being able to engage an M&V contractor to do a complete impact and process evaluation for every energy efficiency and demand response program in the Ameren Illinois Utilities' portfolio. The National Action Plan for Energy Efficiency ("NAPEE") published a draft in July 2007 of the *Model Energy Efficiency Program Impact Evaluation Guide*. The draft cites a rule of thumb that evaluation costs range from 1% to 10% of program costs. The Guide also states that, in general, on a per unit basis, costs are directly proportional to the uncertainty of predicted savings (i.e., projects with greater uncertainty in the predicted savings warrant higher M&V costs). California has created a consistent, systemized approach for planning and evaluating energy efficiency programs, entitled the *California Evaluation Framework*. California

recommends that evaluation spending be between 4 and 10 percent of the program budget. Since this is the Ameren Illinois Utilities' first implementation plan filing, there is uncertainty around all projected budget numbers, including customer participation in the proposed energy efficiency and demand response products and services. In addition, I have been involved in multiple energy efficiency and demand response M&V studies over the years, and the M&V costs typically are closer to 10% of the portfolio cost range – especially in the early stages of an implementation plan.

Q. What is your point pertaining to the restrictive M&V budget specified in the Act?

A. The point is that M&V is extremely important – both to the ongoing continuous improvement of the energy efficiency and demand response programs, as well as to the measurement and verification of demonstrable load reductions. The fact the Act limits the M&V budget to 3% of overall portfolio costs means that Illinois utilities have significant challenges to allocate scarce M&V budget dollars in a manner that balances costs, quality, and accuracy.

Q. Define the term "deemed" as it applies to estimates of kWh load reductions and net-to-gross ratio assumptions for energy efficiency and demand response measures.

A. The term "deemed" refers to an estimate of an energy savings or demand savings or a net-to-gross assumption for a single measure or program that (1) has been developed from data sources and analytical methods that are widely considered acceptable for the measure and purpose, and (2) is applicable to the situation being evaluated.

Q. What is the "net-to-gross" ("NTG") ratio?

A. The NTG ratio is used to convert the gross annual reductions in energy usage to a net value. The net value is specific to the program under consideration, and does not include

reductions that would have occurred absent the program. For example, in evaluating an incentive program, the net kWh should exclude impacts associated with measures that would have been installed to meet building code compliance. NTG is typically viewed as an adjustment to eliminate free-rider effects. Consequently, a net-to-gross ratio of 90% would indicate that, on average, 90% of the indicated gross savings could be attributed to the influences of the program.

Q. Please provide your perspective on using "deemed" savings for some of the programs in the Ameren Illinois Utilities' portfolio?

A. It is prudent and cost effective to use deemed savings and deemed NTG ratios for some energy efficiency measure evaluations. Deemed savings and NTG ratios are used to stipulate energy efficiency measure savings and NTG ratios for projects with well-known and documented values. Examples are energy efficient appliances such as washing machines, computer equipment, refrigerators, and lighting retrofit projects with well-understood operating hours. The use of deemed values in savings and NTG ratios essentially depends on an agreement or understanding between the stakeholders to an M&V process to accept *stipulated* values, or a set of assumptions, for use in determining the baseline or reporting period.

Q. Where did ICF obtain deemed savings and NTG ratios for purposes of analyzing the cost-effectiveness of over 1,000 energy efficiency measures?

A. Mr. Jensen discusses this in his testimony. Data sources include: the Database for Energy Efficiency Resources ("DEER"), maintained by the California Energy Commission; the Consortium For Energy Efficiency ("CEE"); the American Council For An Energy Efficient Economy ("ACEEE"); the U.S. EPA Energy Star Program; and,

ICF's own research. Other sources of best practices information in the development of cost-effective energy efficiency programs include: the California Public Utilities Commission; the Energy Trust of Oregon; and well-established programs at XCEL Energy, Northeast Utilities, Pacific Gas & Electric and the Wisconsin Focus on Energy program.

Q. Is the use of these resources consistent with best practices?

A. Yes. It is likely that any expert M&V contractor would use similar sources as those used by ICF. Deemed values will be based on reliable, traceable, and documented sources of information, such as:

- Standard tables from recognized sources indicating the power consumption (wattage) of certain pieces of equipment that are being replaced or installed as part of a project
- Manufacturer's specifications
- Building occupancy schedules or hourly electric load patterns for specific building types

Q. Is the use of deemed values common in the industry?

A. Yes. The NAPEE *Model Energy Efficiency Program Impact Evaluation Guide* confirms this approach:

> "With the deemed savings approach, it is increasingly common to hold the stipulated value constant regardless of what the actual value is during the term of the evaluation. If certain requirements are met (e.g., verification of installation, satisfactory commissioning results, annual verification of equipment performance, and/or maintenance is being done) the project savings are **considered to be confirmed.**

Q. Discuss the evaluation risks associated with the Ameren Illinois Utilities' Energy Efficiency plan filing.

A. The evaluation risk primarily focuses on the value of deemed savings and NTG ratios used in the cost-effectiveness measurement of the Ameren Illinois Utilities' energy

efficiency portfolio. It is likely that, in an RFP process to select a statewide M&V contractor, the bids will contain a range of recommended "deemed" values to be used. For example, in evaluating a CFL program, each bidder may recommend different values for the average daily hourly use of lighting, the NTG ratio, and the average wattage differential between an incandescent light and a CFL. The load reductions attributable to the CFL program are a major contributor to the overall load reductions goals in the Ameren Illinois Utilities' plan. ICF was engaged to, among other tasks, provide documentable, national best practice deemed value assumptions, for those programs where the use of deemed values are appropriate. The Ameren Illinois Utilities are relying on those deemed values in order to meet a portion of the 2008-2010 load reduction targets. Therefore, to the extent an M&V contractor may have a different perspective based on different deemed value sources, the Ameren Illinois Utilities could be at risk for not meeting their load reduction goals, due solely to the use of different assumptions on deemed values between two consultants – neither of whom would be necessarily right or wrong.

Q. How do the Ameren Illinois Utilities recommend addressing challenges associated with M&V cost, quality and accuracy?

A. First, the Ameren Illinois Utilities recognize that there is no single "correct" answer to address these challenges. We also recognize that the Ameren Illinois Utilities' energy efficiency and demand response portfolio contains a total of 14 individual programs. In addition, the DCEO portion of the Ameren Illinois Utilities' portfolio contains a total of 12 individual programs. If the M&V budget limit is 3% of the Ameren Illinois Utilities' estimated 2008 budget limit of approximately $14 million, the M&V budget is

approximately $420,000. If the M&V budget of $420,000 for 2008 is divided by a total of 14 programs for the Ameren Illinois Utilities and 12 programs for DCEO, the average M&V budget per program would be approximately $16,000, which may barely cover the overhead associated with an M&V contractor evaluating a single program. Consequently, it will be necessary to set specific M&V goals and scale (degree of comprehensiveness) prior to the solicitation and engagement of an M&V contractor.

Q. How do the Ameren Illinois Utilities recommend addressing challenges associated with assessing "deemed" values for use in the measurement and evaluation of program results in the 2008-2010 implementation plan?

A. Ameren witness Jensen describes the recommendation in Section V, "The Use of Deemed Values for Certain Variables" in his testimony. To summarize, the Ameren Illinois Utilities recommend that the Commission deem certain net-to-gross ratios and measure savings values for implementation of the programs.

Q. Please expand on the proposed charter and scope of work for the stakeholder M&V participative process.

A. The charter for the group is to provide input with regard to the M&V provisions of the Act, including the policy and/or regulatory framework in which the evaluation results will be reported. Tasks for the Ameren Illinois Utilities with input from the stakeholder group include:

1) Define evaluation objectives
2) Address scale of evaluation effort
   a. Do well established programs with a history of well-documented savings require the same level of evaluation that a new program, with no history, requires?
   b. How much confidence exists in pre-program savings estimates?
3) Are other co-benefits to be evaluated and possibly quantified?

4) Will persistence of savings be determined?

5) Develop an RFP to engage a M&V contractor

6) Evaluate bids to the RFP and select an M&V contractor.

Q. What is the timing within which the M&V stakeholder process would work and ultimately select an M&V contractor?

A. The M&V contractor should be engaged early enough to actively participate in the final design of programs. At this point, while the Ameren Illinois Utilities have defined the overall framework for programs in the Ameren Illinois Utilities' energy efficiency portfolio, the final design of each program is contingent on bids from third-party implementers. The Ameren Illinois Utilities' implementation plan is described in Section VII in my testimony. The Ameren Illinois Utilities encourage the formation and start of the M&V stakeholder work in early December 2007, with the goal of issuing an RFP to select a master statewide M&V contractor in late December 2007. The expectation is to engage an M&V contractor no later than February 1, 2008. The sense of urgency for selecting an M&V contractor is explained in Section VII in my testimony.

VII. IMPLEMENTATION PLAN

Q. What is the desired date to implement the Ameren Illinois Utilities' energy efficiency programs?

A. The implementation date is set by the Act. The Act states that the utility will implement cost effective energy efficiency measures that reduce 0.2% of energy delivered in the year commencing June 1, 2008.

Q. What is the Ameren Illinois Utilities' perspective regarding the June 1, 2008 date for the implementation of its energy efficiency and demand response products and services to customers?

A. The Ameren Illinois Utilities would like to make available energy efficiency and demand response products and service options to help customers manage their electricity consumptions as soon as possible. Although aggressive, June 1, 2008 is achievable for programs in the Ameren Illinois Utilities' portfolio – if we take early actions in selecting third-party program implementers and the M&V contractor.

Q. How do the Ameren Illinois Utilities expect to manage this most aggressive schedule?

A. Based on preliminary feedback from multiple meetings with the Illinois statewide energy efficiency stakeholders on August 28th, September 13th, September 19th and 20th, October 16th and 17th, as well as other stakeholder teleconferences and other electronic communication exchanges, the Ameren Illinois Utilities are hopeful that their proposed plan will ultimately be approved by the Commission. With this assumption, the Ameren Illinois Utilities recommend that the stakeholder M&V process begin in early December 2007 with the goal of engaging an M&V contractor by February 1, 2008. Also, we recommend that an RFP to solicit bids for third-party implementers for proposed programs be developed, vetted with stakeholders, and issued early in January 2008 with the goal of engaging third-party implementers by February 15, 2008.

Q. Will these two actions alone enable the Ameren Illinois Utilities to roll out 100% of their proposed programs on June 1, 2008?

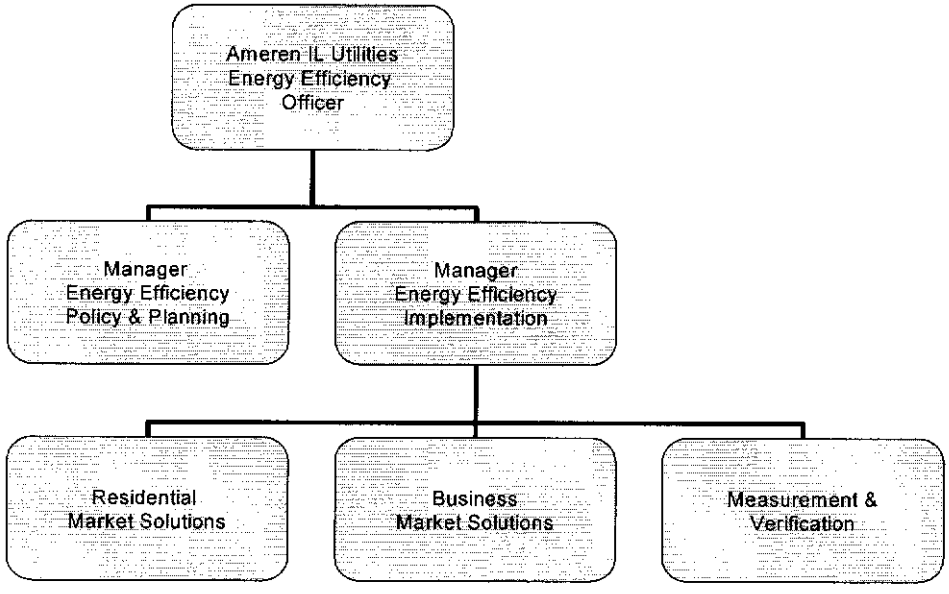
A. No. The Ameren Illinois Utilities will not roll out any programs that are not fully designed and include full back office support. Back office support includes all program and tracking systems that support both program management and program evaluation needs. It is likely that programs will be phased in as quickly as possible after meeting a series of quality control checks.

Q. Have the quality control checklists been developed?

A. No. The checklists will be dependent on final program design. The checklists will be developed jointly by the Ameren Illinois Utilities, third-party implementers, and the M&V contractor.

Q. Describe the energy efficiency organization structure that the Ameren Illinois Utilities will put in place to effectively administer, manage, and deliver their portfolio of energy efficiency programs.

A. The Ameren Illinois Utilities organization structure is:



Q. Please provide a functional overview of the Ameren Illinois Utilities' proposed program management and delivery activities.

A. Functions include:

- General administration and coordination
- Program development, planning and budgeting
- Program/portfolio administration and management
- Program delivery and implementation
- Market assessment and program evaluation

(nee to be consistent in format throughout-sometimes we use 1), bullet points etc)

Q. Discuss the work associated with general administration and coordination.

A. Work focuses on contract management with all contractors associated with the Ameren Illinois Utilities' energy efficiency and demand response programs. The work also includes the development and maintenance of financial accounting systems associated with energy efficiency and demand response work. Finally, work includes the development and maintenance of reporting/information management systems; preparation of quarterly/annual reports; and maintenance of an IT system for reporting and tracking for the Commission as well as internal and stakeholder advisory groups.

Q. Discuss the work associated with program development, planning and budgeting.

A. This work basically builds on the stakeholder participative process used in the development of the Ameren Illinois Utilities' energy efficiency and demand response portfolio. It involves facilitating the public or participative planning process. The work involves program design, portfolio development, and budget estimation. The essence of the work is to build a common understanding as to the cost effectiveness of proposed programs.

Q. Please discuss the work associated with program administration and management.

A. We expect to engage third-party implementers to administer most of the programs in the Ameren Illinois Utilities' energy efficiency portfolio. There will also be energy delivery personnel assigned to manage and oversee individual programs. The Ameren Illinois Utilities' program managers and implementers, along with trade allies, stakeholders, and customers are expected to recommend program improvements based on experience and market response. The Ameren Illinois Utilities' program managers will also be responsible for quality assurance to ensure effective program delivery.

Q. Please describe the work associated with program delivery and implementation.

A. The following are the key components of program delivery and implementation:

- Program marketing/outreach: market individual programs; mass advertising;
- Program delivery services: energy efficiency audits, technical/design assistance, financial assistance/incentives, commissioning, contractor certification and training
- Participation in and implementation of regional and/or national market transformation initiatives
- Measurement and Verification of savings: develop M&V procedures; focus on verification to determine payments to contractors
- Project Development: Develop individual energy efficiency projects at customer facilities

Q. Please discuss the work associated with market assessment and program evaluation.

A. Market assessment involves the identification and characterization of specific energy efficiency and demand response market opportunities. Program evaluation for this work segment focuses on process evaluation for purposes of improving program effectiveness.

Q. How do the Ameren Illinois Utilities expect to manage their overall portfolio to meet load reductions set forth in the Act?

A. Inherent in the plan is the need for flexibility to modify programs as necessary to meet the overall portfolio load reduction goals. At this point, we simply do not know how

much energy efficiency and demand response can be had at what cost over the 2008-2010 planning horizon.

Q. In what other areas do the Ameren Illinois Utilities anticipate the need for flexibility?

A. Even though the program templates define the Ameren Illinois Utilities' proposed energy efficiency and demand response program in detail, the delivery mechanism, incentive levels and/or types and overall projected load reductions could change as a result of the bid proposals from prospective third-party implementers. Individual program parameters based on negotiations with third party implementers may mandate other changes.

Q. Is flexibility needed to address market risk associated with individual programs in their portfolio?

A. Yes. Market risk has been defined as the risk that, either because of a poor economic climate or the availability of better investments, customers choose not to participate in a program. Consequently, if a program is not received well by its intended market, we may need to modify or even eliminate and replace the program within the 2008-2010 planning period.

Q. What is the Ameren Illinois Utilities' proposed approach to address future energy efficiency and demand response program design, evaluation, research and development, customer information and education and other initiatives related to energy efficiency and demand response?

A. The task ahead is daunting, with respect to load reduction goals as well as investments related to achieving those goals. Our approach to meeting the challenges ahead is to work with all stakeholders in participative planning processes to consider and assess all

opportunities. We will use transparent processes to disseminate information and analyses. We will engage competent partners to assist in the systemic analysis of issues and proposed responses to those issues. We, along with our stakeholders, will respect and seriously consider all perspectives.

Q. Does this conclude your Direct Testimony?

A. Yes. It does.

APPENDIX – STATEMENT OF QUALIFICATIONS

My name is Richard Voytas. My business address is One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri, 63103. I am the Manager of Energy Efficiency and Demand Response for Ameren Services Company ("Ameren Services").

I obtained a Bachelor of Science degree in Mechanical Engineering from the University of Missouri-Rolla in 1975 and a Masters in Business Administration from St. Louis University in 1979. I am a registered professional engineer in the state of Missouri. I serve as Ameren Corporations' representative on the Leadership Group of the National Action Plan for Energy Efficiency ("NAPEE"), the Board of Directors of the United States Demand Response Coordinating Committee ("DRCC"), the Association of Edison Electric Illuminating Companies ("AEIC") Load Research Committee, and the National Electric Reliability Council ("NERC") Resource Issues Subcommittee. I am currently the Chair of the NERC Demand Side Management Influence on Reliability Task Force. I also have 32 years of extensive professional work experience with Ameren Services Company and the former Union Electric Company.

I have been a full-time employee of Union Electric since May of 1975, assuming employment with Ameren Services Company when Union Electric Company and Central Illinois Public Service Company merged into the Ameren Corporation. I began employment at Union Electric as an Assistant Engineer in the Engineering and Construction function. In 1977, I was promoted to Fuel Buyer in the Supply Services Function. I transferred to the Engineering Department at Union Electric's Rush Island Plant in 1981. In 1982, I accepted a position in the coal marketing department at Cities Service Company in Tulsa, OK. I left Cities Service Company in late 1982 and returned to Union Electric as an Engineer in the Corporate Planning Department. From 1982 through 1992, I worked as an Engineer in the Corporate Planning

Department, Engineer in the Quality Improvement Department and Engineer in the Rate Engineering Department. I was promoted to Senior Engineer in the Corporate Planning Department in 1993. In 1995, I was promoted to Supervising Engineer in the Demand-Side Management section of Corporate Planning. When the Resource Planning, Forecasting, Load Research and Demand-Side Management sections were combined into one section of Corporate Planning in July 1998, I was named Supervisor of that section known as the Corporate Analysis department. Corporate Analysis was divided into three subgroups which were Resource Planning, Regulatory Compliance – Economic Assessment, and Load Analysis. I was promoted to the position as Manager-Corporate Analysis in October 2001. Effective September 1, 2007, I was named Manager – Energy Efficiency/Demand Response.

My duties as Manager – Energy Efficiency/Demand Response include the following: energy efficiency/demand response policy and planning, mass market implementation planning, commercial and industrial market implementation planning.

I have submitted testimony before the Missouri Public Service Commission, the Illinois Commerce Commission, and the Federal Energy Regulatory Commission.